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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,479	05/17/2001	Christian Brand	44912-20054.00	2988

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EXAMINER

GANTT, ALAN T

ART UNIT PAPER NUMBER

2684

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/858,479	<b>Applicant(s)</b> BRAND ET AL.	
	<b>Examiner</b> Alan T. Gantt	<b>Art Unit</b> 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

**DETAILED ACTION*****Response to Arguments***

Applicant's arguments filed 9/19/05 have been fully considered but they are not persuasive. Applicant primarily argues that in revising the independent claims per the latest amendment that in Kondoh there is no teaching or suggestion of communication between the base station and the response transmitter using at least a first frequency range, and determining whether the base station and the response transmitter are on a same side of a wall using a second frequency. Applicant has amended both independent claims to include such language.

Regarding the arguments, the examiner feels that amended claim language is obvious extension of the teachings of the prior art rejection of record. The supporting Kondoh reference provides for periodic structure on at least a part of a wall constituting a box so that the periodic structures serve as a filter that has a non-propagating frequency band corresponding to a frequency band covering an undesired electromagnetic emission inside the box. Thus, with the Kondoh reference, the wall structure blocks a band of frequencies and passes the other bands. Thus, if a response transmitter operating on the band of frequencies blocked by the wall, receives the signal, then the transmitting base and the response transmitter are on the same side of the wall. The transmitting base station can communicate on all other frequency bands even when the response transmitter on the other side of the wall as a result of the teaching of Kondoh. Thus, applicant's amended claim language is made obvious by the Kondoh reference.

Thus, this Office Action is made Final.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marron et al., in view of Kondoh et al.

Regarding claim 1, Marron discloses a passive keyless entry system that disengages the locking mechanism of an entrance to a restricted area, such as a motor vehicle door, through the use of a coded marker and having means for defining an interrogation zone. The system has a generating means having a frequency band that supplies the marker with a signal identity (page 2, lines 59 to page 3, line 2). Marron meets the limitation:

A method for detection of a response transmitter which communicates with a base station, comprising: communicating using two frequency ranges between the base station and the response transmitter, (page 4, lines 24-58 [Marron suggests one frequency range for the energizing of the interrogation coils for the sending of the interrogation signal and a second frequency range for activating and resonating of the marker])

Marron is not concerned with permeability related to the surrounding space to the frequency ranges.

Kondoh discloses a high frequency communication device designed to reduce undesired electromagnetic coupling inside and outside a box in which circuit parts constituting a

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transmitter/receiver circuit. Periodic structures are provided on the box so that the periodic structures serve as a filter, which has a non-propagating frequency band corresponding to a frequency band covering an undesired electromagnetic emission inside the box. Thus, an undesired electromagnetic emission energy from any electromagnetic emission source can be confined locally to prevent possible electromagnetic interference. Thus, Kondoh meets the limitation:

walls being permeable to a first frequency range and impermeable to a second frequency range, such that communication between the base station and the response transmitter continues using at least a first frequency range, and determining whether the base station and the response transmitter are on a same side of a wall using a second frequency (col. 2, line 39 to col. 3, line 29 - if a response transmitter operating on the band of frequencies blocked by the wall, receives the signal, then the transmitting base and the response transmitter are on the same side of the wall. The transmitting base station can communicate on all other frequency bands even when the response transmitter on the other side of the wall as a result of the teaching of Kondoh).

Marron and Kondoh are combinable because they share a common endeavor, namely devices that utilize different frequency bands for operating functionality. At the time of the applicant's invention it would have been obvious to modify Marron to utilize functional structure to mitigate interference between frequency ranges as done by Kondoh to reduce system costs due to filtering requirements.

Regarding claim 6, Marron discloses a passive keyless entry system that disengages the locking mechanism of an entrance to a restricted area, such as a motor vehicle door, through the use of a coded marker and having means for defining an interrogation zone. The system has a generating means having a frequency band that supplies the maker with a signal identity (page 2, lines 59 to page 3, line 2). Marron meets the limitation:

A communications system, comprising: a base station with a first transmitter/receiver unit for communication signals and a transmitter unit for location interrogation signals; a response transmitter with a second transmitter/receiver unit for the communication signals and a receiver unit for location interrogation signals; (page 4, lines 24-58 [Marron suggests one frequency range for the energizing of the interrogation coils which is part of what would be considered the base station for the sending of the interrogation signal and a second frequency range for activating and resonating of the marker which is equivalent to the response transmitter])

Marron is not concerned with permeability related to the surrounding space to the frequency ranges.

Kondoh discloses a high frequency communication device designed to reduce undesired electromagnetic coupling inside and outside a box in which circuit parts constituting a transmitter/receiver circuit. Periodic structures are provided on the box so that the periodic structures serve as a filter, which has a non-propagating frequency band corresponding to a frequency band covering an undesired electromagnetic emission inside the box. Thus, an undesired electromagnetic emission energy from any electromagnetic emission source can be

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confined locally to prevent possible electromagnetic interference. Thus, Kondoh meets the limitation:

an interior space having walls impermeable to one frequency range, the communication signals being transmitted and received in a frequency range to which the walls are permeable, such that communication between the base station and the response transmitter continues, and the location interrogation signals being transmitted in a frequency range to which the walls are impermeable to determine whether the base station and the response transmitter are on a same side of a wall. (col. 2, line 39 to col. 3, line 29 - Although Kondoh does not call for a location transmitter, the techniques taught by Kondoh would yield applicant's desired results as one band would be allowed to pass through boundaries while the other band would not. if a response transmitter operating on the band of frequencies blocked by the wall, receives the signal, then the transmitting base and the response transmitter are on the same side of the wall. The transmitting base station can communicate on all other frequency bands even when the response transmitter on the other side of the wall as a result of the teaching of Kondoh. Thus, the claim language does not yield any novel or inventive principles)

Marron and Kondoh are combinable because they share a common endeavor, namely devices that utilize different frequency bands for operating functionality. At the time of the applicant's invention it would have been obvious to modify Marron to utilize functional structure to mitigate interference between frequency ranges as done by Kondoh to reduce system costs due to filtering requirements.

Regarding claim 2, Marron meets the limitation - The method as claimed in claim 1, the communication from the response transmitter to the base station occurring in the first frequency range. (page 4, lines 24-58 [the communication between the marker and the base being one frequency range and the trigger for the marker being the second frequency range])

Regarding claim 3, Marron meets the limitation - The method as claimed in claim 1, the base station transmitting a communication signal in the first frequency range and a location interrogation signal in the second frequency range. (page 4, lines 24-58 [the communication between the marker and the base being one frequency range and the trigger for the marker being the second frequency range])

Regarding claim 4, Marron meets the limitation - The method as claimed in claim 1, the base station transmitting location interrogation signals selectively from one of inside and outside the space. (Marron suggests this, page 5, lines 22-32)

Regarding claim 5, Marron meets the limitation - The method as claimed in claim 3, the response transmitter being activated using the location interrogation signal. (page 4, lines 24-58 [the communication between the marker and the base being one frequency range and the trigger for the marker being the second frequency range])



Regarding claim 7, Marron meets the limitation - The communications system as claimed in claim 6, the base station having a transmitter antenna located outside of the interior space and a transmitter antenna located inside of the interior space. (Marron suggests this, page 5, lines 22-32)

Regarding claim 8, Marron meets the limitation - The communications system as claimed in claim 6, the response transmitter including code data, which is transmitted collectively in response to the communications interrogation signal. (page 4, lines 24-58 [the communication between the marker and the base being one frequency range and the trigger for the marker being the second frequency range])

Regarding claim 9, Marron meets the limitation - The communications system as claimed in claim 8, the communications system being a component of an anti-theft system of a motor vehicle, the base station being in a motor vehicle and the response transmitter being carried by a person. (Marron suggests this, page 5, lines 10-21)

Regarding claim 10, Marron meets the limitation - The method as claimed in claim 4, the response transmitter being activated using the location interrogation signal. (page 4, lines 24-58)

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[the communication between the marker and the base being one frequency range and the trigger for the marker being the second frequency range])

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (571) 272-7878. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (571) 273-8300.

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Any inquiry of a general nature or relating to this application should be directed to  
Supervisory Patent Examiner Nay Maung at telephone number (571) 272-7882.

*Alan T. Gantt*

Alan T. Gantt

November 25, 2005

*Nay Maung*  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER